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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.		
10/811,229	03/26/2004	Anu Virtanen	088245-0142 9043		
23524 7590 10/29/2007 FOLEY & LARDNER LLP		EXAMINER			
150 EAST GILMAN STREET			GELIN, JEAN ALLAND		
P.O. BOX 1497 MADISON, W			ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	Nó.	Applicant(s)		
Office Action Summary		10/811,229	. •	VIRTANEN ET AL.		
		Examiner	,	Art Unit		
		Jean A. Gelii	1	2617		
Period fo	The MAILING DATE of this communication app or Reply	pears on the c	over sheet with the co	orrespondence address		
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS 36(a). In no event, will apply and will e, cause the applica	COMMUNICATION however, may a reply be tim xpire SIX (6) MONTHS from the become ABANDONED	lely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status						
1)⊠	Responsive to communication(s) filed on 09 Au	ugust 2007.				
2a)⊠	This action is FINAL . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quay	<i>le</i> , 1935 C.D. 11, 45	3 O.G. 213.		
Disposit	ion of Claims					
4)⊠	Claim(s) is/are pending in the applicatio	n.				
	4a) Of the above claim(s) is/are withdraw	wn from cons	deration.	•		
5)[Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-5,8-13,18,19 and 24-60</u> is/are reject	ted.				
·	Claim(s) <u>14-16 and 20-23</u> is/are objected to.					
8)∐	Claim(s) are subject to restriction and/or	r election req	uirement.			
Applicati	ion Papers	•				
9)□	The specification is objected to by the Examine	er.				
	The drawing(s) filed on is/are: a) acce		objected to by the E	Examiner.		
	Applicant may not request that any objection to the	drawing(s) be	neld in abeyance. See	⊋ 37 CFR 1.85(a).		
	Replacement drawing sheet(s) including the correct	tion is required	if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).		
11)	The oath or declaration is objected to by the Ex	aminer. Note	the attached Office	Action or form PTO-152.		
Priority (ınder 35 U.S.C. § 119		·	·		
	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of:			-(d) or (f).		
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents		• •			
	3. Copies of the certified copies of the prior	•		ed in this National Stage		
* 9	application from the International Bureau See the attached detailed Office action for a list	•	, ,,	d		
	see the attached detailed Office action for a list	or the certifie	a copies not receive	u.		
Attachmen	• •	41		(DTO 442)		
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4)	Paper No(s)/Mail Da	nte		
3) Infor	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	. 5 _.	Notice of Informal Page 1	atent Application		

Application/Control Number: 10/811,229 Page 2

Art Unit: 2617

DETAILED ACTION

1. This is in response to the Applicant's arguments and amendments filed on August 09, 2007 in which claims 1, 2, 4, 5, 10-12, 14-16, 18-25, 27, 28, 31, 37-39, 42, 48-50, 53, 54, and 59 have been amended. Claims 6, 7, and 17 have been amended. Claims 1-5, 8-16, and 18-60 are currently pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 25 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 25 lacks the proper preamble necessary for a statutory computer program claims. See MPEP 2100 for guidance on computer related invention.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2617

4. Claims 1-5, 8-13, 18-19, and 24-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US 2003/0039270) in view of Parkwall et al. (US 2006/00986688).

Regarding claims 1, 24-27, 38, and 49, Chang teaches a method of providing signaling in a communication link between a sending node and a receiving node (fig. 9, [0062]), the method comprising: providing a current a current transmission which includes a predetermined bit pattern (i.e., transmitting a MAC signaling message including control information and a signaling indication indicating transmission of control information [0033], [0035], [0062]-[0064], and [0068]). Chang further teaches the computer program is run in a processing means which forms part of an uplink/downlink dedicated channel transmission module of either the sending node or the receiving node (i.e., MAC-hs is installed in a node apparatus which inherently includes a processor for performing the function of sending and receiving [0065]-[0068]).

Chang does not specifically teach whether control information in the current transmission can be used alone for decoding a transport channel.

However, the preceding limitation is known in the art of communications.

Parkwall the TFCI informs the receiver about the instantaneously transmitted uplink

DPDCH radio frame [0037], one TFCI is transmitted in each radio frame [0045], and

TFCI includes control information and predetermined bit pattern. Parkwall further teaches data transmitted in the frame on the DPDCH is decoded using the TFCIsf information [0073]-[0076]. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Parkwall within the

Application/Control Number: 10/811,229

Art Unit: 2617

system of Chang in order that a majority vote on the sub-frame decoding attempts of a received radio frame is determined prior to any decoding attempt of an entire radio frame [0078]).

Regarding claims 2, 28, 39, and 50, Chang in view of Parkwall teaches all the limitation above. Parkwall further teaches a transport format combination indicator (TFCI) in the current transmission contains the control information in the current transmission ([0037]).

Regarding claims 3, 29, 40, and 51, Chang in view of Parkwall teaches all the limitation above. Parkwall further teaches a transport format combination indicator (TFCI) in the current transmission contains the predetermined bit pattern ([0072]).

Regarding claims 4, 30, 41, and 52, Chang in view of Parkwall teaches all the limitation above. Chang further teaches the current transmission using a hybrid automatic repeat request (HARQ) protocol ([0024], [0028], and [0083]-[0084]).

Regarding claims 5, 31, 42, and 53, Chang in view of Parkwall teaches all the limitation above. Chang further teaches the current transmission comprises a retransmission of the earlier transmission of the same block ([0088]).

Regarding claims 8, 34, 45, and 56, Chang in view of Parkwall teaches all the limitation above. Chang further teaches the sending node is user equipment and the receiving node is a node B in an uplink ([0081]-[0082]).

Regarding claims 9, 35, 46, and 57, Chang teaches the sending node is a Node B and the receiving node is user equipment in a downlink ([0081]-[0082]).

Application/Control Number: 10/811,229

Art Unit: 2617

Regarding claims 10, 36, 47, and 58, Chang in view of Parkwall teaches all the

limitation above. Chang further teaches the predetermined bit pattern consists of only

one bit ([0063]).

Regarding claims 11, 37, 48, and 59, Chang in view of Parkwall teaches all the

limitation above. Chang further teaches the predetermined bit pattern consists of more

than one bit in a predetermined pattern, including a bit pattern of "00" or "11" ([0063]

and [0078]).

Regarding claims 12, Chang in view of Parkwall teaches all the limitation above.

Parkwall further teaches the TFCI contains one bit in the form of a TFCI flag indicating

how to decode data blocks in a current data frame ([0021], [0068], and [0073]-[0074]).

Regarding claim 13, Chang in view of Parkwall teaches all the limitation above.

Chang further teaches a separate dedicated control channel contains the predetermined

bit pattern ([0063], [0076]-[0078]).

Regarding claim 18, Chang in view of Parkwall teaches all the limitation above.

Chang further teaches an acknowledgement (ACK) is sent depending on the outcome

of the decoding ([0078]).

Regarding claim 19, Chang in view of Parkwall teaches all the limitation above.

Chang further teaches a no-acknowledgement (NAK) is either sent or not sent

depending on the outcome of the decoding ([0078]).

Regarding claims 32, 43, and 54, Chang in view of Parkwall teaches all the

limitation above. Chang further teaches the signaling is used for decoding a transport

channel being sent in the communications link ([0012]).

Application/Control Number: 10/811,229

Art Unit: 2617

Regarding claims 33, 44, and 55, Chang in view of Parkwall teaches all the limitation above. Chang further teaches the communication link is an uplink or a downlink ([0065], and [0076]-[0077]).

Regarding claim 60, Chang in view of Parkwall teaches all the limitation above.

Chang further teaches the system is a communication system ([0030]-[0032]).

Allowable Subject Matter

5. Claims 14-16 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-5, 8-13, 18-19, and 24-60 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yi et al.	US 2004/0117860	06/17/2004
Pedersen et al.	US 2005/0170830	08/04/2005
Willenegger	US 2006/0251191	09/11/2006
Numminen	US 20020064140	05/30/2002

Application/Control Number: 10/811,229 Page 7

Art Unit: 2617

Wintzell US 2005/0003782 01/06/2005

Walton et al. US 2005/0120097 06/02/2005

Ishida US 7,168,015 01/23/2007

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/811,229 Page 8

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEAN GELIN PRIMARY EXAMINER

JGelin October 19, 2007